

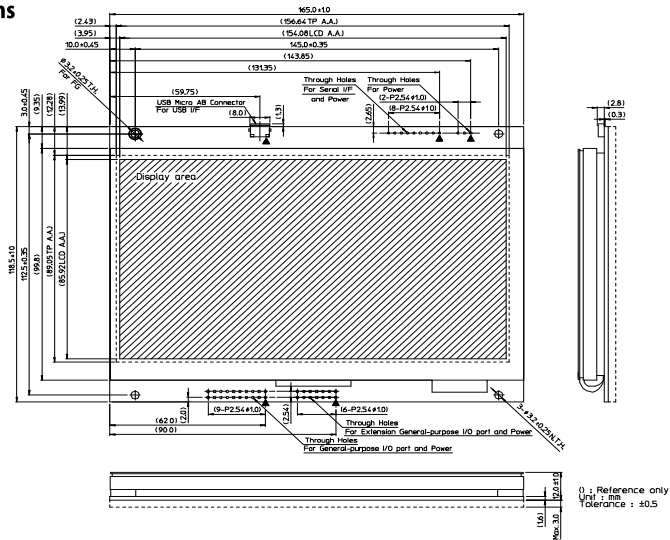
GTWV070C3A00PA

SIMPLIFIED DATASHEET

■ Features

- 7 inch TFT-LCD
- LED backlight module
- Wide-VGA: 800 x RGB x 480 pixels
- High brightness (850cd/m2)
- FLETAS capacitive touch panel
[Features of FLETAS]
 - High sensitivity
 - Excellent noise resistance

■ Physical Dimensions



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Specifications

■ Basic Specification

Item	Content	
Display	Display Area	154.08 x 85.92 mm (X x Y)
	Number of Pixels	800 x RGB x 480
	Pixel Pitch	0.1926 x 0.179 mm (X x Y)
	Colors	6.5k colors (16-bit color (RGB 5-5-5+1bit intensity))
	Viewing Direction	12 o'clock
	Gray Scale Inversion Direction	6 o'clock
FLETAS Touch Panel	Type	MPCT (Metallised Projective Capacitive Touch) multi-touch support
	Interface	Serial interface (UART / I2C / SPI CMOS 3.3V)
Other	Interface	USB interface (High-speed / Full-speed)
	Weight	Approximately 267g

■ Electrical Ratings

Parameter	Symbol	Min.	Typ.	Max.	Unit	Condition
Power Supply Voltage	VCC	4.75	5.00	5.25	VDC	-

Measuring Conditions: Ambient temperature = 25 °C, VCC=5.0VDC

■ Electrical Characteristics

Parameter	Symbol	Min.	Typ.	Max.	Unit	Condition
UART	Logic output voltage TXD,DTR	VsOH1	2.8	-	-	VDC IOH=-1.6mA
		VsOL1	-	-	0.4	VDC IOL=1.6mA
I2C / F	Logic output voltage TRDY, SBUSY	VsOH2	2.8	-	-	VDC IOH=-1.6mA
		VsOL2	-	-	0.4	VDC IOL=1.6mA
SPI	Internal pull-up resistance SDA, SCL	Rp	-	10	-	kΩ
	Logic output voltage TXD,DTR,MISO	VsOH3	2.8	-	-	VDC IOH=-1.6mA
		VsOL3	-	-	0.4	VDC IOL=1.6mA
GPIO Port	Logic input current	IiIH	-	-	1.0	μADC
		IiIL	-	-	-200	μADC
Port 0,1,2,3	Logic input voltage	ViiH	2.4	-	3.3	VDC
		ViiL	0	-	0.8	VDC
Power 3.3V	Logic output voltage	VioH	2.8	-	-	VDC IOH=-200 μA
		VioL	-	-	0.4	VDC IOL=1.6mA
GPIO Port	Output current (Single port)	IiOHp	0	-	-5	mADC
		IiOLp	0	-	5	mADC
Port 0,1,2,3	Output current (Sum of all port)	IiOHT	0	-	-80	mADC
		IiOLT	0	-	80	mADC
Power 3.3V	Output current 3.3V	IpOHp	0	-	-20	mADC
Power Supply Current	ICC-1	-	720	940	mADC	(*1) 100% Brightness
	ICC-2	-	460	-	mADC	(*2) 50% Brightness
	ICC-3	-	230	300	mADC	Display power OFF
	ICC-4	-	65	95	mADC	(*3) Sleep mode
Power Consumption	P-1	-	3.6	4.7	W	(*1) 100% Brightness
	P-2	-	2.3	-	W	(*2) 50% Brightness
	P-3	-	1.2	1.5	W	Display power OFF
	P-4	-	0.3	0.5	W	(*3) Sleep mode

(*1) All black display, (*2) All white display, (*3) Wakeup on GPIO

■ Interface Details / Connectors

• Serial Interface (UART / I2C / SPI CMOS 3.3V) [CN9]

Pin No.	Signal			Function	Direction
	UART	SPI	I2C		
1	-	/RESET	-	Reset	Input
2	-	SCK	SCL	Serial Clock	Input
3	RXD	MOSI	SDA	Data Receive	Input/ Output
4	DTR	SBUSY	-	Display Busy	Output
5	DSR	SSEL	-	Host Busy	Input
6	TXD	MISO	-	Data Send	Output
7	-	TRDY	-	Target Ready	Output
8	-	VCC	-	Power Supply (5V)	-
9	-	GND	-	Ground	-

• USB Interface [CN3]

Pin No.	Signal				
1	VBUS	2	D-	3	D+
4	ID	5	GND		

NOTE: Shorting JPO enables power supply from VBUS.

• Power Through-holes [CN8]

Pin No.	Signal	Function
1	VCC	Power Supply (5V)
2	NC(*TEST)	No Connection
3	GND	Ground

*Factory test use only

• General Purpose I/O & Power Through-holes [CN10][CN11]

Please see the Hardware Specification for details.

■ Environmental Specifications

Parameter	Contents
Operating Temperature	-20 to +70 °C
Storage Temperature	-30 to +80 °C
Operating Humidity (No condensation)	Temp. ≤60 °C, 80% RH MAX. Temp. > 60 °C, Absolute humidity shall be less than 80% RH at 60 °C
Vibration (non-operating)	10-55-10Hz, all amplitude 1mm, 30 minutes, X-Y-Z
Shock (non-operating)	392m/s ² (40G) 9ms X-Y-Z, 3 times each direction

■ Selectable Font

Parameter	Contents
1-byte(dot)	6x8, 8x16, 12x24, 16x32, International font
2-byte(dot)	16x16 (Japanese/Korean/SimplifiedChinese/TraditionalChinese), 32x32(Japanese)
Outline Font	Source Han Sans

■ Functions

Character display, graphic display, control command, display action command, window function, touch panel input, general-purpose I/O port control, macro, program macro function, character and image download function, memory SW, data storage, display orientation function, power saving function, etc.

